

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of monitoring traffic in a network comprising the steps of:

receiving at least one data packet at a network interface, said network interface further comprising:

a) a run-time system first module handling

communications between interacting with the network and a host, and

b) at least one or more programmable processing modules in communication with said first module through an application programming interface; and

processing information in the at least one data packet at using the at least one a programmable processing block module, thereby to generateing output using the application programming interface which can be relayed from the network interface to the host network information.

2. (Currently amended) The invention method of claim 1 wherein the network interface comprises a plurality of processing modules blocks and wherein a plurality of outputs network information are is generated by the processing modules blocks which can be relayed from the network interface to the host.

3. (Currently amended) The invention method of claim 2 1 wherein the at least one programmable processing blocks module are is generated from a processing query expressed in a high-level language.

4. (Currently amended) The invention method of claim 3 wherein the processing query accesses functions defined in the first module run-time system.
5. (Currently amended) The invention method of claim 2 1 wherein the outputs network information is are condensed statistics of network performance.
6. (Currently amended) The invention method of claim 1 wherein the at least one programmable processing module block performs filtering on the information in the at least one data packet.
7. (Currently amended) The invention method of claim 1 wherein the at least one programmable processing module block performs a transformation on the information in the at least one data packet.
8. (Currently amended) The invention method of claim 1 wherein the at least one programmable processing module block performs aggregation on the information in the at least one data packet.
9. (Currently amended) The invention method of claim 1 wherein the first module run-time can pass parameters to the at least one processing module block, thereby changing the processing performed by the at least one processing module block.
10. (Currently amended) The invention method of claim 1 wherein the first module run-time system can instantiate new processing modules blocks dynamically.
11. (Currently amended) The invention method of claim 1 wherein the network is a Gigabit Ethernet network.

12. (Currently amended) The invention method of claim 11 wherein the at least one data packet is an Internet Protocol datagram.
13. (Currently amended) An apparatus for monitoring traffic in a network comprising:
~~a run-time system network interface receiving at least one data packet, said network interface comprising: which can execute at a network interface~~
~~(a) a first module handling communications between the network and a host, and receive information from data packets in a network; and~~
~~(b) at least one or more programmable processing blocks interacting with the run-time system through an application program interface in communication with the first module and such that the processing blocks can process the information in the at least one data packets to and generate network information output using the application program interface which can be relayed from the network interface to a host.~~
14. (Currently amended) The invention apparatus of claim 13 wherein the apparatus ~~comprising~~es a plurality of:
~~processing blocks and wherein a plurality of outputs are network information is generated by the processing blocks which can be relayed from the network interface to the host.~~
15. (Currently amended) The invention apparatus of claim 14 wherein the at least one programmable processing module blocks is are generated from a processing query expressed in a high-level language.
16. (Currently amended) The invention apparatus of claim 15 wherein the processing query accesses functions defined in the first module run-time system.
17. (Currently amended) The invention apparatus of claim 14 wherein the network information is outputs are condensed statistics of network performance.

18. (Currently amended) The invention apparatus of claim 13 wherein the at least one processing module block performs filtering on the information in the at least one data packet.
19. (Currently amended) The invention apparatus of claim 13 wherein the at least one programmable processing module block performs a transformation on the information in the at least one data packet.
20. (Currently amended) The invention apparatus of claim 13 wherein the processing module block performs aggregation on the information in the at least one data packet.
21. (Currently amended) The invention apparatus of claim 13 wherein the first module run-time system can pass parameters to the at least one processing module block, thereby changing the processing performed by the at least one processing module block.
22. (Currently amended) The invention apparatus of claim 13 wherein the first module run-time system can instantiate new processing modules blocks dynamically.
23. (Currently amended) The invention apparatus of claim 13 wherein the network is a Gigabit Ethernet network.
24. (Currently amended) The invention apparatus of claim 23 wherein the data packet is an Internet Protocol datagram.